

Climate Action Council Draft Scoping Plan Comments July 1, 2022

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Introduction

Scenic Hudson applauds the Climate Action Council and its Advisory Panels and Working Groups for all of the research, analysis, and deliberation that went into crafting the Draft Scoping Plan. In general, the Draft Scoping Plan represents a solid start on a pathway to meeting New York's transformational, nation-leading climate goals as codified in the Climate Leadership and Community Protection Act ("CLCPA"). We acknowledge that the profound recommendations contained in the Scoping Plan will fundamentally change how our society lives and works, and see it as a strategic working document which will inform and support long term as well as year to year program, policy and budgeting decisions.

We appreciate that the transformation envisioned in the report is already in progress, and that the state is working to position existing assets to advance the plan objectives even as it continues to consider the need for, and availability of, additional resources. Scenic Hudson also fully appreciates that New York State is at a point of strategic alignment with federal policy and programs as it engages in climate change. Working with our federal partners, New York is well positioned to advance its constructive, comprehensive climate change agenda.

Our primary concern is ensuring that the Scoping Plan contain specific, implementable recommendations and programs to achieve the dramatic scale and speed of transition required across all components of New York's economy. While we focus our comments here on two key issues – transforming the energy system by retiring fossil fuel facilities and accelerating renewable energy development and encouraging the spread of climate resilient farming practices to all of New York's farms – similar dynamics will be encountered in every sector. We also need to encourage homeowners and businesses to adopt energy efficiency and beneficial electrification, deploy sufficient electric vehicle charging infrastructure for all New York vehicles and ensure auto dealerships around the state are ready to sell and service EVs, and support hundreds of thousands of workers to develop skills and find jobs in the clean energy economy, to name just a few.

Scenic Hudson understands that the intensive rethinking and rebuilding of our systems needed to transition to a healthier, sustainable future, along all sectors will necessarily come with attendant costs and challenges.

We strongly embrace the CAC's leadership efforts to thoughtfully and strategically incorporate the important work and priorities of the Climate Justice Action Group throughout the draft scoping plan to ensure equity and empowerment for environmental justice and other struggling communities as the state works advance the CLCPA. Here, it will critical to bear in mind the challenges these communities and other like them face such as disproportionate levels of poverty, limited access to financial and technical assistance, underdeveloped services delivery systems, lack of economies of scale and heavy reliance on part time and volunteer service providers. Assistance provided to these communities should include a mix of capacity building strategies which allow the benefits achieved in these communities to be sustainably maintained over time, as well as positions them to take advantage of future opportunities.

On a related note, as New York moves through the process of transforming all sectors of the economy to meet the CLCPA goals, policy makers, state agencies and others must remain attentive to the potential disproportionate impacts and unintended consequences on disadvantaged communities and other vulnerable sectors. In the Hudson Valley, our disadvantaged communities represent many diverse peoples – approximately 47 percent of the region’s total population - who are living in urban, suburban and rural areas.

For the purposes of our comments on the draft Scoping Plan that relate to the siting of renewable energy facilities and development of agricultural and forestry management practices that can meaningfully contribute to meeting the goals for the state’s climate law, we respectfully submit agriculture is also a vulnerable sector that must be considered and centered in discussion.

Invariably, this process will require significant recapitalization and trigger potential cost shifts that will manifest themselves throughout the economy. To protect disadvantaged communities and other vulnerable sectors such as agriculture, the state must ensure that transformative improvements can be done in an affordable and manageable fashion that minimizes economic and other disruptions; New York State must be ready to provide financial and technical support to ensure that these sectors and populations have the resources, tools, and flexibility needed to make the changes envisioned in the scoping plan to achieve climate objectives.

Cross Cutting Issues and Considerations

The CLCPA presents a set of intersectional strategies for the state to pursue to meet its climate goals. Across sectors, common needs exist and some common strategies can apply. Scenic Hudson respectfully recommends that the state focus on the following cross-cutting issues to effectively advance the goals of the climate law: rapid scaling up of policies and programs, enhancement of financial incentives and technical support to localities, support for local government, regional engagement strategies (including a proposed ‘circuit rider’), and removal of administrative barriers to program participation. Additional information on these recommendations are detailed below.

Rapid scaling up required: The Draft Scoping Plan rightly acknowledges a wide array of innovative policies and programs that have been encouraging the spread of these technologies and practices to early adopters across the state for many years. But now the state must aspire to reach *everyone* in all of these categories and several more at a rate faster than it is currently doing. Existing efforts will need to be scaled up anywhere between 10 and 100-fold over their current rates of achievement in order to successfully reach everyone they need to. The Scoping Plan should explicitly recognize and address this challenge. In every sector and for every strategy, it should attempt to estimate how much faster programs will need to accomplish their intended transformation, and then address concretely how that scaling will be achieved.

Financial incentives and technical support are critical: Local governments, households, and businesses will need more incentives, more resources, and above all high-quality information and intensive technical support in order to achieve the clean energy and climate stabilization transformation in the timeframe that are required. Cross-cutting strategies should be considered to address these needs. We should invest quickly and effectively in education targeted to diverse audiences – including households, businesses, workers, youth and students – on the coming clean energy transition, how they can benefit from it, first steps they can take, and resources available to support them. In conjunction with this cross-cutting effort, the many Draft Scoping Plan recommendations for programs with marketing, outreach, and education components should each explicitly address how they will successfully reach the majority of their target audiences by 2030.

As the state advances programmatic supports and collaboration on a broad scale, Scenic Hudson also wishes to reinforce the importance of infusing supports on a granular level, promoting collaborative technical assistance and while maximizing opportunities to leverage federal, state, local, private sector, association and philanthropic resources to support the advancement of individual projects.

Support of local government is essential for effective implementation: Scenic Hudson strongly encourages the state to recognize that our communities and local governments will be central players in this transition. The report places heavy reliance on local governments to serve as agents of change and addressing climate change and resiliency - citing them as keystones of the state's clean energy, adaptation and resilience and greenhouse gas emission mitigation strategies.

Local governments are expected to engage in intense planning and project advancement across all sectors to support effective expansion and in many cases, redirection of their efforts. This work is in addition to their current multifaceted obligation to provide essential public services. While the report makes a strong acknowledgement of their vital role and provides thoughtful detailing of supports available to local governments for multiple planning engagements, the nature of the state's strategies to address climate change require that all of these changes will occur on the ground, in every region of the state. Local governments and community organizations are key to building new infrastructure, implementing new building practices, and supporting local constituencies.

With that said, however, the final Scoping Plan should reinforce the need to further strengthen the basic capacity of a large segment of the local government population in order to assure they can be effective partners. The bulk of New York State local governments are small with more than 67% of its 933 towns and 93% of its 555 villages representing communities of less than 5,000 persons. These governments rely on part time governing structures with limited budgets and professional staff. The majority of these municipalities represent rural areas of the state with a landmass that is over 80% farms and forest. Additionally, many cities, towns, villages and counties in New York State suffer from disproportionate levels of poverty and

depressed economic conditions. As with all of us, the constraints placed on them by the pandemic has made it harder for them to perform their responsibilities.

Regional engagement strategies are a necessary precondition for success: Over the next year, an explicitly regional approach should be developed that draws upon regional resources and networks to begin positively engaging a much wider array of local governments in understanding and preparing for CLCPA implementation. This effort must invest heavily in our local communities, especially in areas where local governments will be taking on new responsibilities and mandates. Most local governments, especially in our smaller cities and towns, are highly capacity constrained and struggle to take on any additional activities. CLCPA implementation will be a massive ask for them; the state must be sure it is providing sufficient technical and financial support for implementing new responsibilities with sufficient lead time for communities to be successful.

County governments and regional planning organizations can and do provide support, but will also be hard pressed under current budgeting and staff constraints help provide local governments with the support needed to advance the level and intensity of challenges envisioned in the scoping report.

An effective cross-cutting strategy to consider here would be the creation of a “circuit-rider” program to embed assistance in local governments to help serve as a conduit and support for accessing information, understanding requirements and resources, developing programs, securing and administering grant funding, as well as individual project facilitation.

Remove barriers to program participation: Another strategy that can and should be applied immediately across sectors is assessing and removing barriers to utilization of existing programs. Unfortunately, many of New York’s existing programs also have a reputation for complex procedures, inflexible program requirements, and lengthy delays for reimbursement of upfront costs by participants. Every existing program that the Scoping Plan seeks to build upon should be reviewed for where these barriers exist and how they can be reduced while seeking federal, state and local regulatory flexibility in the advancement of projects and other initiatives. In particular, rebate-based programs that require expensive outlays followed by reimbursement months after complex paperwork is completed should be restructured wherever possible. This is an equity issue as well as a massive barrier to participation. In their current form, these programs can only be used by those who can afford to spend and wait.

We now will focus our in-depth comments below on two areas where achieving greater speed and scale is crucial: transforming electricity generation and broadening the spread of climate resilient farming practices. In both sections we examine what’s needed to scale up existing efforts and offer a specific, implementable program that builds on the recommendations presented in the Draft Scoping Plan. We also offer recommendations on additional issues in each section.

Comments on Chapter 13: Electricity

The electricity sector is the vital foundation for decarbonizing New York's entire energy system. Achieving the CLCPA's 2030 and 2040 clean electricity targets is essential in order to provide carbon-free energy to New York's buildings, vehicles, and industries. The Draft Scoping Plan contains solid recommendations to support this transition by employing three main strategic themes: transforming power generation by retiring fossil fuel fired facilities and accelerating renewable energy development; enhancing the grid; and investing in new technology.

In our comments we focus on the first strategic theme: eliminating fossil fuel generation and accelerating renewable energy. First, we make suggestions regarding the proposed resource planning process and support the proposed moratorium on permitting new fossil generation until full guidance for evaluating reliability needs and solutions is developed.

Second, recognizing that the scale and required speed of the energy transition represents an enormous challenge relative to historical rates of building new renewable generation capacity, we address two areas critical to achieving targets: supporting clean energy siting and community acceptance, and reducing interconnection costs and delays. While the Draft Scoping Plan addresses these, we feel the recommendations are insufficient and offer ways to strengthen its proposed strategies based on our experience in the Hudson Valley region, where support for renewable installations is relatively strong, but good projects still face sometimes insurmountable hurdles.

The Final Scoping Plan Should Provide Clear, Balanced Guidance for Phasing Out Fossil Fuel Generation

Summary:

- We support strategy E1's recommendation for a regular and transparent resource planning process that ensures the achievement of emission reduction targets and compliance with DEC regulations. We caution this process must be carefully designed to include an appropriate range of agencies and stakeholders to ensure rapid decarbonization while maintaining grid reliability.
- We support the Climate Justice Working Group's recommendation on strategy E1 for a moratorium on permitting new fossil fuel plants until the resource planning process is in place and detailed guidance has been developing for identifying and addressing the rare cases in which fossil fuel facilities may be needed to meet system needs.

Recognizing that achieving a 100% emissions-free power grid will require phasing out the use of fossil fuel for power generation over time, Strategy E1 proposes retirement of fossil fuel fired facilities. We support (Strategy E1) the recommendation for a regular and transparent resource planning process that ensures the achievement of emission reduction targets and compliance with DEC regulations. The strategy calls for a detailed process to ensure that the fossil fuel generators are gradually and safely retired, while still maintaining reliability. The proposed

process is intended to identify any potential risks or needs to ensure consumer energy reliability while transitioning away from fossil fuel electricity generation, fully explore emissions-free solutions for any reliability needs or risks identified, and, in the rare instance that fossil facilities are deemed required, ensure that their use supports evolution of the energy system to meet the goals of the CLCPA.

We believe such a process is absolutely needed and should be implemented swiftly but also carefully. We would note from an institutional point of view that it is essential that the process be designed to include a strong role for agencies and stakeholders whose mandate is to move the clean energy transition forward. Reliance on the agencies and stakeholders who have traditionally played the predominant role in electricity system planning processes may lead to an unintentional but still real institutional bias in favor of the status quo.

For example, Strategy E1 says that fossil fuel facilities “should only be considered if the NYISO and local transmission operators confirm that the fossil fuel fired facility is required to maintain system reliability and that need cannot reasonably be met with the alternatives listed above.” While we recognize that the NYISO is the organization ultimately responsible for the reliability of the electricity system, has deep expertise for evaluating reliability risks, and must play a strong role in the evaluation of reliability risks and solutions, we note that the environment is not one of the NYISO’s clients and maintaining climate stability is not part of NYISO’s mission. It would be inappropriate to give the NYISO and other transmission operators *sole* responsibility for determining the need for new fossil facilities.

We also support the Climate Justice Working Group's recommendation for a moratorium on permitting new fossil fuel plants until the resource planning process is in place and detailed guidance has been developing for identifying and addressing the rare cases in which fossil fuel facilities may be needed to meet system needs.

In this context, we would note that the State Environmental Quality Review Act guidance has not yet been updated to reflect the CLCPA, so communities and lead agencies who may be evaluating applications for small fossil fuel facilities have no information about how to assess consistency with the CLCPA’s current and future requirements.

Until full guidance is available for both large and small projects, a moratorium on permitting new fossil fuel generation is appropriate in order to prevent a patchwork of judgment about specific applications and the unnecessary construction of new future stranded assets.

The Final Scoping Plan Should Provide for a Comprehensive Community Benefit, Outreach and Planning Support Program to Increase Local Capacity for Successful Renewables Siting

Summary:

- The final Scoping Plan should include a detailed plan for a statewide community outreach and education campaign on the benefits of renewable energy, conducted in partnership with local non-profit and community-based organizations.
- The draft Scoping Plan's multiple recommendations on siting and community acceptance need to be recast as a comprehensive, well-supported clean energy community planning program to help communities proactively plan for renewable deployment that maximizes local benefit and minimizes impact on lands with high-quality soils, forests and other competing uses and to build and act upon community consensus about where renewables are best sited. The program should include statewide or regional Clean Energy Development Mapping Tools to help communities identify their best sites for development, intensive support for regional cohorts of communities using the tool to achieve consensus on the best sites for renewables, a toolkit of ways to attract projects to those consensus sites, and both technical and financial support for updating comprehensive plans and zoning for renewables. Scenic Hudson's Solar Mapping Tool is an example of a mapping tool that provides not only mapped data but educational context and a process and framework for communities to use in identifying responsible renewable energy sites.
- The draft Scoping Plan's recommendations on benefits and equity need to be strengthened. NYSERDA should not only try to educate the public about the benefits of renewables, but actively work with developers and communities to create and deploy business models that visibly deliver tangible economic benefits to host communities, such as community ownership, power purchase agreements that lock in stable electricity prices, and accelerated renewable development via community choice aggregation.

The CAC Integration Analysis estimates that, over the decade from 2020 to 2030, somewhere between 16 to 18 GW of new land-based wind and solar will need to be added to meet New York's CLCPA goals, plus an additional 25 to 27 GW over the following decade. Despite New York's long history of climate and clean energy leadership, our rate of renewable energy installation has been far slower than in many states that lack ambitious climate goals but have different siting and permitting processes. According to the US Energy Information Administration, over the five years between 2016 and 2020, New York was in the bottom third of states for the rate of wind capacity additions and roughly at the national average rate of utility-scale solar additions¹. Compared to 2.5 GW of solar² installed over the last five years, and a mere 600 MW of wind over the past decade, what we need to accomplish is an astronomical ramp-up in the rate of installations. Thus it is imperative that we support host communities and reduce interconnection costs and delays.

Scenic Hudson supports the strong historical role New York State communities play in making decisions about local land uses. We believe local communities are well placed to determine

¹ Based on US Energy Information Administration, *Existing Nameplate and Net Summer Capacity by Energy Source, Producer Type and State (EIA-860)* available at <https://www.eia.gov/electricity/data/state/>.

² From NYSERDA, <https://www.nyserdera.ny.gov/All-Programs/NY-Sun/Solar-Data-Maps/Statewide-Projects>.

what gets built and how in their local contexts. Given the unprecedented rate of building we need to undertake, communities will need intensive support to make high quality, efficient decisions to site good projects well (and to avoid the risk of building poor projects they may come to regret). In addition – and considering the rising skepticism about renewable builds in many parts of the state – communities need a much clearer path to appreciating and realizing real benefits from the installations they host. With resistance to the CLCPA and misinformation about the draft Scoping Plan already emerging at local governments around the state³, the need to clearly communicate with, listen to, and support local governments is urgent.

In addition to providing support for community decision-making and counteracting misinformation, mitigation of known negative impacts of large-scale renewables should be part of New York's climate plan. For example, large-scale renewables have documented negative effects on wildlife; technological solutions have been successfully piloted but more funding is needed to support continuing research and implementation. Substantial progress towards mitigating such impacts of renewable energy development and operation, alongside combatting misconceptions and promoting community support for responsibly sited renewables, will help to accelerate the needed development of renewable energies.

The draft Scoping Plan recognizes that successful siting and community acceptance is critical to achieving rapid deployment of new renewable facilities. The need to support local clean energy siting and community acceptance is recognized not only in the Electricity Chapter (Strategy E4), but also in Chapter 19 Land Use (Strategy LU8: Provide Guidance on Clean Energy Siting to Localities) and Chapter 20 Local Government (Strategy LG3: Clean Energy Siting Support for Local Governments). As summarized in Chapter 13:

New York needs a multi-pronged approach with communities to support the siting and acceptance of renewable energy facilities, including wind, solar, storage, and transmission upgrades. This multi-pronged approach should include strong communication, engagement, and public outreach to communities. It should also include promotion of the benefits that renewable energy projects will provide, while working with communities to maximize these local benefits and minimize impact on lands identified by communities with other competing uses such as farming and agricultural soils.

We support these strategies and their components, which should be included and strengthened in the Final Scoping Plan as described below.

The State Should Partner with Trusted Community Members and Organizations to Conduct Public Outreach, Engagement and Education on the Benefits of Renewable Energy

The Electricity Chapter (Strategy E4) includes plans for a statewide public education and outreach program to inform New Yorkers about the climate crisis and the benefits of shifting to

³ See for example recent testimony before the Delaware County Board of Supervisors and the resolution adopted at its April 13, 2022 meeting: <https://www.delcony.us/wp-content/uploads/2022/04/2022-04-13-Board-Meeting-Minutes.pdf>.

a clean energy economy, and funding for non-profits and community-based organizations to conduct such education and outreach. We support this strategy and encourage inclusion of more detailed information and direction in the final Scoping Plan for developing, launching and funding such a campaign.

The State Should Focus on Supporting Community Decision-making, not Just on Reducing Soft Costs for Developers

The New York State Energy Research and Development Authority (“NYSERDA”) has long framed its local government siting support programs in terms of reducing soft costs to developers. In this framing, communities and their concerns show up as market barriers to be reduced. In order to achieve the rate of renewable development that we need to meet our climate goals, in communities all across the state, this framing has to be turned on its head.

What’s needed is a full-fledged community decision support program to help municipalities “undertake a comprehensive evaluation of the potential for clean energy development in their communities and to plan proactively for deployment that maximizes local benefit and minimizes impact on lands with high-quality soils, forests and other competing uses.”⁴

To begin addressing these needs in the Hudson Valley, Scenic Hudson created the How To Solar Now toolkit.⁵ The toolkit is designed to support communities in a rapid transition to a sustainable, low carbon region increasingly powered by clean, emissions-free renewable energy while also protecting and preserving our invaluable scenic, historic, agricultural, environmental and economic resources.

It includes a siting guide that walks communities through ways to develop solar while protecting community resources including agricultural lands, scenic views, and historic sites, a zoning guide that advocates explicitly pro-solar zoning that transparently identifies and protects community priorities, and a mapping tool that guides users step-by-step through a solar planning process that includes assessing solar opportunity sites such as rooftops and previously disturbed areas; avoiding areas where impacts may be negative, such as floodplains, wetlands, forest cores, and cultural heritage sites; prioritizing environmental justice areas; and considering feasibility factors such as land slope, hosting capacity, and access to transmission. The toolkit also includes guidance for replicating the mapping tool across the state.

Scenic Hudson believes that the best way to accelerate well-sited, well-designed renewable energy projects is a community-level, transparent, proactive process in which communities make well-informed decisions about what kind of projects make sense in their communities and, crucially, where they should be sited. Today communities are almost always passive recipients of projects designed by developers who may be totally ignorant of community priorities. Proposed projects often throw the community into a divisive fight over the details of

⁴ Draft Scoping Plan p. 292.

⁵ <https://scenichudson.org/our-work/climate/renewable-energy/howtosolarnow/>

just that one project. Afterwards, the community is bruised but no closer to any kind of consensus on what they favor and how to make it happen.

The alternative is a process that brings all stakeholders in the community together to review, in detail, the opportunities for solar, the critical resources they want to protect, and the areas where solar will be most economically viable and best serve existing and anticipated load centers. A mapping tool that provides the detailed resource, land use, land cover, and utility information to support this process is essential, as is a well-designed and well-supported process to utilize it.

The State Should Provide New Tools, Resources and Training for Local Governments, including a Statewide or Multiple Regional Renewable Energy Mapping Tools

This decision-support program should include a Clean Energy Development Mapping Tool to help communities identify their best sites for development, intensive support for communities using the tool to achieve consensus on the best sites for renewables, a toolkit of ways to attract projects to those consensus sites, and both technical and financial support for updating comprehensive plans and zoning for renewables. We were delighted to see recommendations appearing in both the Electricity (Strategy E4), and Land Use chapters (LU8) of the Scoping Plan to develop a statewide renewable energy mapping tool, and hope that the Scenic Hudson Solar Mapping Tool can serve as a model for either a statewide tool or multiple regional renewable energy siting tools.

Based on our experience, any such resource must be user-friendly – designed to be accessible to any municipal official or engaged stakeholder – and provide detailed, step-by-step guidance to working through each data layer systematically in a logical order. In order to maximize uptake, webinars and multiple-session training cohorts were extremely useful. After attendance in such training on the Solar Mapping Tool held in the fall of 2021 and spring of 2022 conducted by Clearwater and New Yorkers for Clean Power with Scenic Hudson support, users reported that the tool was in fact easy to use and provided a valuable depth of information to help evaluate and prioritize sites.

If the State simply produces a mapping tool, however well designed, without providing a sufficient level of support and training, uptake may be slowed. Therefore, the State should develop and roll out a full curriculum of support for users, including hands-on, regional peer group sessions where users are walked through how to use the tool. Critically, this process must be available to every community in New York State, not just a handful of early adopters. And beyond use of the tool, communities must be supported in the next step, which is incorporation of priority sites into local planning and zoning, with stakeholder agreement and community input. Communities will also require both technical and financial support for legal and engineering work on updating their comprehensive plans and zoning, including how best to adapt and tailor NYSERDA's model solar and storage laws for their community

It will be necessary to build out regional capacity across the state to provide this support, as part of a well-integrated regional approach to CLCPA implementation. The regional planning commissions should play a strong role in this process. We would also suggest that NYSERDA competitively fund local community organizations that are viewed as trusted resources for environmental resource planning within each local region. Alternatively, NYSERDA could utilize the Clean Energy Communities (CEC) coordinators network for this purpose. If NYSERDA plans to rely on the CEC coordinators to provide this technical assistance, we would suggest increasing funding statewide to bring on enough additional coordinators such that each one can focus on a two-to-three county subregion and work intensively with cohorts of peer communities. NYSERDA should also look at ways to offer incentives to communities that complete a site prioritization process using the tool.

Good siting planning is of limited use without follow-through. In addition to a well-designed mapping tool and supportive training, communities need a toolkit of ways to use the maps they create of desirable project sites. In addition to incorporating these outcomes into comprehensive plans and zoning, options to encourage project development could range from developing processes for speedier approval of sites and project designs on a pre-approved list to a framework RFP for communities to actively seek developers for community-prioritized sites, similar to the Build Ready program. The farther along we can move communities from passive recipients of developer-proposed projects to active co-designers of desired projects, the better we will facilitate the rapid speed of development required.

The State Should Increase Host Community Benefits

Finally, all the best technical support and policy guidance in the world will not be enough to achieve the scale we need unless communities clearly see direct, tangible benefits to themselves of renewable development (Strategy E4). While renewable energy has the potential to offer communities many benefits, including cleaner air, local ownership and control of energy, increased reliability, and stable energy prices, these benefits are far more diffuse, especially on a per-acre basis, than those historically provided by fossil fuel plants, which often offer communities very visible tax revenue and job benefits. And current renewable business models are frequently far from realizing all the potential benefits. Additionally, the state should not only try to educate the public about the benefits of renewables, but actively work with developers and communities to create and deploy business models that visibly deliver tangible economic benefits to host communities.

For example, the predominant business model for community solar developments at this time is a consumer discount, usually ten percent, from utility supply prices. This has the benefit of being simple to explain, and it avoids any upfront costs for participants. However, as the current run-up in energy prices has made clear, it lacks what can be one of the most crucial renewable selling points for both municipalities and local residents and businesses – insulation from volatile energy markets. Communities hosting wind and solar should have direct access to the stable, low cost energy that these facilities provide. We're also increasingly hearing resistance to "corporate" renewable energy, suggesting that models of community ownership

and community control need to be further developed and aggressively supported, including facilitating renewable development by community choice aggregation programs. The state should work with developers and communities to structure offerings that make the kitchen table economic benefits of hosting renewables clear and obviously appealing.

The Final Scoping Plan Should Include a Comprehensive Program to Increase Uptake of Agrivoltaics in New York

Summary

- The CAC’s recommendation in Strategy E4 (Support Clean Energy Siting and Community Acceptance) that the State should “research and incentivize the viability of agrivoltaics” (defined as “the co-location of solar powered projects and agriculture”) to “integrate solar into the agricultural communities and provide habitat improvement for threatened and endangered species”⁶ should be retained and expanded into a comprehensive agrivoltaics program in the Final Scoping Plan.
- Such a comprehensive agrivoltaics program should include the following components: a definition of agrivoltaics; research and pilot projects; effective outreach and education; market incentives; enabling local laws; and additional legislative and regulatory action that supports uptake.

The potential impacts on agricultural soils and farmland of the significant amount of large scale and distributed solar energy development necessary to meet CLCPA targets has been raised in many potential host communities and by farmers and others across the state. Recognizing this concern, the Draft Scoping Plan includes a recommendation that the State should “research and incentivize the viability of agrivoltaics” (defined as “the co-location of solar powered projects and agriculture”) to “integrate solar into the agricultural communities and provide habitat improvement for threatened and endangered species.” Scenic Hudson supports this recommendation, which should be retained and expanded in the Final Scoping Plan into a comprehensive program to enable and support agrivoltaics in New York.⁷

Agrivoltaics, and the strategic combination of agricultural and solar energy systems in general, can provide many benefits, including increased global land productivity;⁸ improved crop yield and resilience;⁹ reduced environmental impacts;¹⁰ rural economic opportunities;¹¹ protection against drought and heat stress;¹² soil regeneration;¹³ increased crop production, among other

⁶ Draft Scoping Plan p. 162.

⁷ See also Comments of Clean Energy Advocates on Establishment of an Agrivoltaics Program for New York in the Final CLCPA Scoping Plan, dated July 1, 2022.

⁸ *Examining existing policy to inform a comprehensive legal framework for agrivoltaics in the U.S.*, Alexis S. Pascaris, *Energy Policy*, Sept. 29, 2021 (“Pascaris”).

⁹ *Id.*

¹⁰ *Id.*

¹¹ *Id.*

¹² *Id.* p. 2.

¹³ Transforming solar sites from liabilities to assets, Solar Power World Online, Billy Ludt, May 12, 2022, (Ludt): <https://www.solarpowerworldonline.com/2022/05/transforming-solar-sites-from-liabilities-to-assets/>

benefits, in drylands;¹⁴ improvements for pasture-based agricultural processes;¹⁵ restoration of pollinator habitat;¹⁶ ¹⁷ increased local acceptance and support of solar projects;¹⁸ ¹⁹ and diversification of income for farmer landowners.²⁰

Solar energy facilities as a land use can and must be positioned to serve existing community goals such as economic growth, diversification of the tax base, job creation, localization of energy generation, and farmland preservation.²¹ With regard to the latter, projects that strategically combine agricultural and solar energy production can play a critical role, but the key is to establish an effective program that identifies opportunity areas, puts farmers and solar developers together and provides them with sufficient information and guidance, and provides the market incentives and regulatory framework needed to achieve this vision.

One of the first elements of a comprehensive agrivoltaics program will be to establish a definition. Agricultural and solar systems can be strategically combined in many ways: from “pollinator-friendly” solar, to co-location of solar and grazing, to siting solar on certain farmland while other farmland remains in production, to full integration of solar energy and crops in a way that does not significantly reduce agricultural production or revenues. In order to enable agrivoltaics, the State should develop a definition that recognizes its different forms (and what is and what is not technically “agrivoltaics”) and ensures that the benefits of combining solar and agriculture are maximized.

Next, while examples of “pollinator-friendly” solar and co-location of solar and sheep grazing are becoming more abundant in New York, we are not aware of any major agrivoltaic installation that combines crops and solar energy production. This indicates a need for research and innovation. To assess and gain the potential benefits of combining agriculture and solar in New York as quickly as possible in the interest of meeting renewable energy targets, New York must enable and fund research and pilot projects to rapidly identify and develop guidance and best practices.

A third critical component of a comprehensive statewide agrivoltaics program will be a well-funded and effective outreach and education program to inform farmers, communities and

¹⁴ How “Agrivoltaics” Can Provide More Benefits Than Agriculture and Solar Photovoltaics Separately, Energy Innovation, November 1, 2021, (“Energy Innovation”): <https://energyinnovation.org/2021/11/01/how-agrivoltaics-can-provide-more-benefits-than-agriculture-and-solar-photovoltaics-separately/#:~:text=The%20model%2Dbased%20results%20showed,processing%20of%20agricultural%20products.%E2%80%9D%20The>

¹⁵ *Id.*

¹⁶ Butterflies, bees, sheep, and solar energy production can coexist, Ryan Kennedy, June 6, 2022, <https://pv-magazine-usa.com/2022/06/06/butterflies-bees-sheep-and-solar-energy-production-can-coexist/#:~:text=EDF%20Renewables%20maintains%20a%202023.4,%2C%20butterflies%2C%20and%20sheep%20grazing>.

¹⁷ Energy Innovation.

¹⁸ Pascaris, p. 2.

¹⁹ Energy Innovation.

²⁰ AFT, p. 5. Solar development can negatively impact viability for farmer-renters, however. *Id.* p. 16.

²¹ Pascaris.

developers of benefits and best practices, both to the extent they are already known, and as more information is developed.

Fourth, the State New York has three existing programs to build the solar market that can and should incorporate incentives for solar facilities that include agrivoltaics (including pilots and research projects): NYSERDA annual Large Scale Renewables (LSR) solicitations; the NY-Sun Program; and the Build-Ready Program. The 2022 LSR solicitation (and future solicitations) should use a revised Smart Solar Siting Scorecard in a manner that incentivizes the inclusion of agrivoltaics, co-location, pollinator-friendly vegetation, and/or demonstrates that a project is providing financial income to a farmer to help continue farming. The recently adopted order to expand the NY-Sun program to 10 GW acknowledged comments calling for an agrivoltaics “addition,” but stated that the record is incomplete and directed [Department of Public Service (DPS)] staff to “evaluate the potential for such an adder (whether on a stand-alone basis, or as an expansion of an existing adder focused on beneficial siting) and submit a proposal for Commission consideration if such an adder is deemed necessary and reasonable.”²² We encourage DPS staff to take up this directive and consider how best to incentivize agrivoltaics in the NY-Sun program in the future. Finally, NYSERDA should explore how to encourage and incentivize such requests in the Build-Ready Program to the extent that such previously developed sites provide the opportunity for agrivoltaics.

Fifth, because local planning and zoning can play a critical role in enabling agrivoltaics for all sizes of solar projects, the State should update the Model Solar Law to include suggested enabling language for agrivoltaics. This should be combined with workshops and technical assistance to promote the incorporation of such provisions in local zoning laws. Last, the State should explore additional legislative and regulatory measures to enable agrivoltaics, including a stand-alone agrivoltaics build-ready program, aligning major renewable energy regulations with new LSR agrivoltaics incentives, favorable tax provisions, and classification of agrivoltaics as a Type II action and exempt from review under the State Environmental Quality Review Act under certain conditions.

While agrivoltaics is encouraged in New York policy, there are currently no concrete incentives or mandatory requirements for developers to include agrivoltaics as part of project design. In order to remove barriers and enable its uptake in the interest of meeting renewable energy targets, the Final Scoping Plan should include a comprehensive agrivoltaics program with the components described above.

The Final Scoping Plan Should Include Concrete Measures to Resolve Interconnection Delays and Bring Down Interconnection Costs

Summary:

²² Case 19-E-0735, Petition of New York State Energy Research and Development Authority Requesting Additional NY-Sun Program Funding and Extension of Program Through 2025, Order Expanding NY Sun Program, April 14, 2022, p. 49, available at:

<https://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?Mattercaseno=19-E-0735>

- On strategy E3, we recommend that the state conduct a thorough review of interconnection applications, the resulting interconnection costs, and project outcomes to identify when and where projects are being stalled by untenable costs and cost surprises. If the review reveals that costs are a substantial barrier to otherwise promising projects, methods should be developed to bring costs down and/or provide better data to reduce development time and investment lost to cost surprises.
- On strategy E3, we also recommend a systematic review of the impacts of VDER rate designs on the market for projects of different sizes serving different customers and investors, with a focus on reducing uncertainties about future revenues where this is slowing market adoption.

A significant delay to clean energy buildout that we cannot afford and must address are those caused by the interconnection process. As part of Strategy E3, which is to facilitate distributed generation and distributed energy resources, the draft Scoping Plan recognizes that the State must speed up the pace of processing interconnection applications and ensure right-sizing human resources at utilities to mitigate delays in application processing. Here in the Mid-Hudson region we've seen several examples of projects that are well-designed, well-sited, and have full community and local government support languish for years because of interconnection delays and unsupportable interconnection costs. Strategy E3 recognizes the need to speed up the interconnection process but does not address the cost issue.

In our region, interconnection costs -- and their unpredictability -- are stalling high quality, community-supported projects. For example, the Ulster County Quarryville project is located on the site of a former tire dump in Saugerties. The County acquired the site by foreclosure with the intention to develop the County's second solar installation. The 2.25 MW installation was designed to be a community solar project, with the County the primary offtaker and remaining generation available by subscription to the community at large.

Based on initial data available at project design, including the availability of an existing three-phase line less than one mile away, the selected developers estimated an interconnection cost of approximately \$500,000. An initial feasibility screening with the utility revealed no issues that would hamper interconnection. Several months later, when the formal interconnection request was made, the cost came in at \$4.5 million, or nine times the original estimate, rendering the project infeasible. The utility said that a new, dedicated feeder needed to be built to the substation more than four miles away, across the Thruway, rather than using the existing line. The Department of Public Service denied an appeal for an independent assessment of the cost, saying they saw no reason to disagree with the utility's assessment. The project is now indefinitely stalled, awaiting either an increase in available incentives to support the project or identification of additional projects that could be sited along the same new line and share the cost. The developer noted that they had experienced several such surprise interconnection cost outcomes with the utility that had similarly stalled projects.

In many ways this was an ideal distributed solar project. It utilizes a contaminated site, that was unsuitable for other development. It has full community support and siting approvals. It would have reduced energy costs for the host local government as well as serving individual consumers in the community.

We recommend that the state conduct a thorough review of interconnection applications, the resulting interconnection costs, and project outcomes to identify when and where projects are being stalled by untenable costs and cost surprises. If the review reveals that costs are a substantial barrier to otherwise promising projects, methods should be developed to bring costs down and/or provide better data to reduce development time and investment lost to cost surprises.

Additionally, while Strategy E3 recommends continued development of the Value of Distributed Energy Resources (VDER) rate design, we would caution that anecdotally we've seen the revenue uncertainties brought about by VDER pricing inhibit some kinds of projects. We recommend a systematic review of the impacts of VDER rate designs on the market for projects of different sizes serving different customers and investors, with a focus on reducing uncertainties about future revenues where this is slowing market adoption.

Comments on Chapter 15: Agriculture and Forestry

Introduction

Scenic Hudson directionally supports the recommendations in the *Soil Health, Nutrient Management, and Agroforestry* section within the *Agriculture and Forestry* chapter of the *Draft Scoping Plan*, and we appreciate having had the opportunity to participate in the draft Scoping Plan planning process as a member of the Climate Action Council's Agriculture and Forestry Advisory Committee. The chapter describes several promising strategies for investing in climate resilience and carbon sequestration on working lands. In particular, strategies *AF12. Adopt Soil Health Practice Systems*, *AF14. Develop Agricultural Environmental Management Planning for Climate Mitigation and Adaptation*, and *AF16. Establish a Payment for Ecosystem Services Program* together constitute the components of a successful program to develop and scale soil health and climate resilience practices on New York's farms. Our comments are focused on honing these recommendations into a pathway forward towards implementation of these strategies.

In addition, Scenic Hudson directionally supports comments on the draft Scoping Plan submitted by the Northeast Carbon Alliance. Founded by Scenic Hudson, NECA uses science and collaboration to bring together land managers, scientists and public policy experts to realize the great power of natural climate solutions to combat climate change – from mountaintop to ocean floor – in the Hudson Valley, New York, Northeastern states, and beyond. While NECA affiliates contributed ideas to Scenic Hudson's comments on the agricultural portions of the draft Scoping Plan, Scenic Hudson is the primary author of these comments.

Definition of terms

In our comments, we refer to specific terms to describe approaches New York State might take to achieve the goals of strategies AF12, AF14 and AF16.

We define “Voluntary Conservation Incentive programs” (a.k.a. “Payment for Practice programs”) as state programs that provide financial payment to farmers and other land stewards in exchange for implementing or continuing best management practices, including soil health practices, determined to be the most effective, economically feasible and practicable means of improving soil health, improving water quality, and reducing pollution generated by runoff. These practices often have the co-benefits of adapting to and mitigating the effects of climate change and capturing carbon in soil. The state’s current Agricultural Environmental Management framework, and Climate Resilient Farming grants and Agricultural Non-point Source Pollution Control grants program within the State’s Environmental Protection Fund are examples.

By contrast, “Payment for Ecosystem Services” means a framework that compensates farmers and other land stewards for implementing soil health practices, promoting watershed health and applying any other land management practices and systems that produce measurable ecosystem services including, but not limited to, reduced nutrient runoff into watersheds for improved water quality; flood, erosion and drought mitigation through increased soil water-holding capacity; climate resilience through carbon sequestration; safe habitat for pollinators and other native wildlife; and economic stabilization and revitalization from reduced spending on externalities. Implicit in this definition is the concept of quantifying and verifying the benefits produced. We recognize the state has made important strides in the arena of quantification and verification, however observe that additional development of science and policy is needed to strengthen the deployment of a Payment for Ecosystem Services program and support targeted achievement of its intended goals and benefits. Payment for Ecosystem Services programs have been envisioned in a variety of forms, including but not limited to direct payment programs, grant programs and market-based programs.²³

Crosscutting Issues and Considerations for Agriculture

Agriculture is one of the few sectors that cannot only reduce its *own* emissions but also sequester emissions from other sources, so that it can become a net negative sector. With the tremendous potential benefits to New York State communities from improving the climate and economic resilience of local farms, investing in farmland conservation, and strengthening local food webs, the opportunities in the sector are considerable. However, experience with the very gradual pace of adoption of on-farm conservation practices through existing voluntary conservation incentive programs (also known as ‘payment for practice’ programs) shows that

²³ Our Payment for Ecosystem Services (PES) definition is adapted from Vermont Legislature’s Soil Conservation PES Working Group Report (<https://legislature.vermont.gov/assets/Legislative-Reports/Soil-Conservation-Practice-and-PES-Working-Group-Report-01152020.pdf>) and the Finger Lakes PES Report executive summary (https://docs.google.com/document/d/1QqUf0iO7QX2N_tDhbrWmkW7cyCHv_h0vnwxUnoumtz4/edit?usp=sharing).

we cannot expect to achieve the scale of investment in climate resilient farming practices needed to achieve the sector's potential without an integrated and well-supported networks of programs that successfully combines all three of these strategies. The dramatic increase in the scale of work required necessitates some careful strategizing on how to increase the reach of these programs successfully.

At the same time, it is essential to recognize that New York State's farms are privately owned and managed lands, and their economic viability is farmers' primary concern. Many of New York's farms are already operating on razor-thin economic margins, and climate change impacts will only further stress farm finances. Farmers cannot and will not invest at the scale we need in new practices without program support that reduces, in their judgment, the risks of doing so.

Related to the economic viability of New York State agriculture, we encourage the state to work closely with the agricultural sector to position itself to grow its national market share as western US agriculture becomes less viable from lack of water and wildfires. While this strategy is not contemplated in our comments below, we believe it is a worthwhile cause, and one which has the potential to align with programs that achieve soil health goals on agricultural lands within the state.

Our comments are directed at crafting programs that will effectively accomplish this. Our primary recommendation is to enhance existing Voluntary Conservation Incentive (Payment for Practices) programs while we simultaneously act swiftly to roll out a Payment for Ecosystem Services program centered around a suitably updated version of the Agriculture Environmental Management (AEM) whole-farm planning model. In this context, the new Payment for Ecosystems Services program must take advantage of the latest science to measure the accrued ecosystem benefits as accurately as possible, to the extent practicable in any budget cycle, and be managed adaptively as new data and information becomes available. Consequently, we also support recommendations for further research into soil health management practices and their benefits, but caution that we cannot wait to implement programs at scale until research results are in, and we suggest ways to assess and reduce barriers to entry for all of New York's voluntary farmland conservation management programs.

The Final Scoping Plan Should Recommend a Payment for Ecosystem Services Program Centered around Whole-farm Planning

Summary:

- A well-founded, well-executed, and well-funded program to support and incentivize farmers to invest in farm-specific soil and health and climate resilience measures is essential to achieve the potential that New York's farmlands can contribute to New York's climate solutions. We recommend that the Final Scoping Plan revise and combine strategies AF12, AF14, and AF16 outline a coherent Payment for Ecosystem Services program that can be implemented at a speed and scale appropriate to our current climate crisis. Essential elements of such a program include definition and promotion of

soil health practice systems, whole-farm planning within the AEM framework that recognizes and serves the diversity of New York's farms by integrating climate mitigation and adaptation measures into AEM's whole farm planning process as well as across New York's other voluntary and educational programs, and incentive payments tied to achieving and maintaining farm-specific plan measures.

- We support the recommendations in strategy AF12 for continuing and accelerating research towards the quantification of benefits from soil health practices, monitoring and verification of benefits, and development of innovative practices. However we caution that full scale deployment of Payment for Ecosystem Services program cannot wait until this research supports complete quantified measurement and verification of outcomes. Instead programs should rely in the meantime on verification of implementation and ongoing maintenance of farm-specific measures identified in whole-farm AEM planning. Research outcomes should be continuously incorporated into AEM planning frameworks.

Strategy *AF12. Adopt Soil Health Practice Systems* provides a good outline of the necessary content components of soil health and climate resilient farming practice systems, as called for in the *Soil Health and Climate Resiliency Act*, signed by the Governor just days before the release of the *Draft Scoping Plan*. The *Act* represents the first significant update to New York's framework for voluntary farmland management since the incorporation of water quality management goals in the 1980s and 1990s. The *Act* calls for the development of Soil Health and Climate Resiliency Initiatives within the Department of Agriculture and Markets, in cooperation with the Soil and Water Conservation Committee and its associated districts. The Scoping Plan process offers an opportunity to connect these new initiatives directly to the CLCPA planning process. The *Act* also provides a clear definition of soil health that should be adopted and utilized in the Scoping Plan.

Strategies *AF14. Develop Agricultural Environmental Management Planning for Climate Mitigation and Adaptation* and *AF16. Establish a Payment for Ecosystem Services Program*, in our view, together describe a solid approach for implementing these initiatives – built on a foundation of current knowledge, institutional practice, and existing sector relationships – in ways that can scale beyond early adopters. However, Strategy *AF16* in particular needs to be significantly strengthened in order to achieve the goals of widespread adoption of soil health and climate resilience practices over the next two decades.

In 2018, Scenic Hudson conducted an extensive stakeholder outreach process²⁴ to inform soil health and climate resiliency initiatives in the Hudson Valley. Following input from more than 200 agricultural stakeholders in the region, we have concluded that a successful program to scale investment in soil health and climate resilient farmland practices must:

²⁴ <https://www.scenichudson.org/wp-content/uploads/2019/10/Climate-Resilient-Agriculture-in-the-Hudson-Valley.pdf>

- Recognize the heterogeneity of farms, in terms of soil types, ecosystems, products, markets, size, farm resources, etc. and create and incentivize farm-specific practice implementation plans;
- Harness peer-to-peer learning, within the context of Soil and Water Conservation District networks, so that farmers can directly communicate with each other – their own most trusted resources – about the benefits and challenges associated with adopting new practices;
- Reach and serve farmer groups that have been traditionally underserved by NYS incentive programs, including young farmers, farmers of color, small farms, and farms with diverse product mixes;
- Provide sufficient technical and financial resources to farmers to reduce risks associated with practice adoption; and
- Ensure the long-term economic viability of farms engaging in conservation practices.

The Agriculture Environmental Management (AEM) and Climate Resilience Farming (CRF) Programs Provide a Solid Foundation for Supporting Adoption of Soil Health and Climate Resilient Farming Practices

Our stakeholder engagement revealed that the Agriculture Environmental Management (AEM) program stands out as one that successfully works with farmers to evaluate on-farm conditions and opportunities, educate farmers about opportunities for environmental improvements, and develop and implement farm-specific, whole-farm environmental improvement plans. However, the AEM program requires significant updates to meet soil health and climate resiliency goals.

Until the creation of the Climate Resilience Farming (CRF) program in 2015, which enhanced the AEM planning framework to include GHG mitigation, energy efficiency, and climate resilience goals, AEM environmental farm management planning did not significantly emphasize climate mitigation and adaption goals. The CRF experience demonstrates that the AEM framework can be successfully adapted and enhanced to serve New York’s climate goals. However, so far the majority of CRF funding has been directed to reducing methane emissions at dairy farms, and very little has supported soil health practices.

The AEM planning framework needs to be substantially updated, as called for under strategy AF14, to center evaluation, improvement, and sustaining of soil health and utilization of climate resilient practices that are appropriate for all of New York’s diverse farms. As part of this process, a careful review of the program criteria for the CRF grants program should be undertaken to ensure that the state funding and technical outreach services provided by the SWCDs will prioritize adoption of farming practices that sequester carbon and reduce other greenhouse gas emissions. In this respect, Scenic Hudson concurs with the following specific comments submitted by the Northeast Carbon Alliance:

- Tiers 2 & 3 of the AEM framework should focus more on incentivizing practice adoption at the systems level, including encouraging incremental transitions to pasture-based livestock production & composting, long annual-perennial crop rotations with cover crops, organic no-till, and agroforestry practices like alley cropping and silvopasturing. As such, the AEM program should adopt more long-term engagement and funding streams to this end.
- Integrating AEM and CRF funding to de-risk experimentation for New York’s cutting edge farmers who are driving innovation in the space of complex climate-smart, regenerative systems.
- Farmers learn best from their peers and are more apt to adopt proven strategies and systems that they can experience in practice. These programs should also significantly increase funding for technical assistance and farmer networking to ensure the success of this approach. The state must recognize the profound impact that farmers at the vanguard of regenerative, climate-smart agriculture can have on the rest of New York State farmers, and should develop well-funded program components that support farmers who are driving regenerative system innovation in New York State.
- Because of their immense potential for generating durable, long-term carbon removals, and their potential for seamless integration into livestock, grain, and specialty crop production systems, agroforestry practices must be at the center of any state-level program that is aimed at incentivizing climate-smart agricultural system adoption. The United States has been significantly lagging behind the EU and the rest of the world in levels of funding allocated to scaling agroforestry practices, despite their proven potential. There is a tremendous opportunity for NYS to step in as a leader in this regard, and specific near-, mid- and long-term targets for agroforestry adoption should be set as a parameter of these state incentive programs.

Additionally it will be essential to review all of the state’s voluntary programs and educational initiatives to ensure these practices are integrated across programs and offerings. We would recommend that programs be restructured so that all projects that receive public funding are required to incorporate soil health practices as defined in Agriculture and Markets law.

Pilot studies that are testing the efficacy of the state’s existing Agriculture Environmental Management Program to deliver the technical information and support to farmers necessary to scale up the role of working farms to contribute to meeting the state’s greenhouse gas reduction goals are already underway. The 2018 Hudson Valley Carbon Farming Pilot Study, championed by Assemblywoman Didi Barrett, Assemblywoman Donna Lupardo, Senator Hinchey and former Senator Metzger, involves 20 Hudson Valley farms of varying size and production type that are implementing regenerative farming and soil health practices and documenting their findings. The study’s progress has been routinely shared with the scientific, policy, and agricultural communities through a series of webinars co-sponsored by the NYS

Department of Agriculture and Markets and Scenic Hudson.²⁵ The study is anticipated to be complete in 2023.

A Payment for Ecosystem Services Program is Crucial to Scaling up Soil Health and Climate Resilient Farming Practices

It is essential to recognize that a CRF-style program would need *significant* scaling in resources and reach in order to achieve these goals. Over its first six years²⁶, the CRF program reached only 200 of New York 35,000 farms, or less than one percent. At that rate, to reach all of New York's farmers would take nearly 1,000 years. To reach them all over the next two decades, the reach of the program would need increase more than 50-fold. In view of this dramatic need to scale, Strategy AF16. *Establish a Payment for Ecosystem Services Program* is insufficiently strong and specific. With so many of New York's farms already operating close the economic margin, farmers need to perceive clear benefits to investing in new practices that may substantially disrupt their current production models. We need to get beyond the pilot stage very quickly and roll out a payment for ecosystem services program that can support farmers across the state and across farm types in climate resilient practices appropriate to farm diversity. (Additional important strategies for achieving scale successfully are discussed below.)

It may be objected that a full-fledged Payment for Ecosystem Services program will require methods to quantify and verify benefits as the basis for payment. As discussed below, we cannot afford to wait until ongoing research into measuring and verifying soil health practice benefits bears full fruit to begin investing in soil health and farmland climate resilience at scale. Until methods for precise quantification of benefits at scale exist, we believe that successful participation in the AEM program offers an excellent framework for substantiating payments for ecosystem services across a diversity of farms.

Under this model, financial incentives would be provided to farms that successfully implement whole-farm plans under a climate-enhanced AEM program and participate in AEM's ongoing monitoring. These incentives could include grants, low-interest loans for farmer cost shares, and changes to the tax code that provide relief from property and/or income taxes for verified participants. Similarly, tax credits or equipment rebates for investments in energy efficiency and decarbonization of farm energy supply could help secure farms against fluctuating energy prices and increase the long-term financial health of participating farms. In order to serve the diversity of New York farms, it will be crucial to offer a menu of incentives that farmers can tailor to their own business models.

Combining strategies AF12, AF14, and AF16 into a research-informed, well-funded program that successfully works with farms across New York's diverse landscape by supporting and incentivizing farmers to invest in farm-specific soil and health and climate resilience measures is essential to achieve the potential that New York's farmlands can contribute to New York's

²⁵ Recordings of these events, and testimonial of farmers participating in the pilot study, are available on Scenic Hudson's YouTube channel at <https://www.youtube.com/user/scenichudson/featured>.

²⁶ <https://agriculture.ny.gov/system/files/documents/2022/01/climateresilientfarmingfactsheet.pdf>

climate solutions. A payment for ecosystem services program based on this framework can begin to rapidly scale up adoption of climate resilient farming practices, while continuing to evolve with ongoing research.

The State Must Continue Research to Quantify Benefits – But We Can't Wait for It

Research currently underway to quantify the benefits of climate resilient farming practices and to develop measurement, monitoring, and verification methods for soil carbon storage benefits is essential and must continue.

Examples of soil health testing initiatives that we would call to the Council's attention include:

- Hudson Carbon, located in Livingston, Columbia County, has established an on-farm soil laboratory and is studying how organic regenerative farming can maximize carbon capture and restore ecosystems. Their partnership with Woods Hole Marine Biological Laboratory is collecting soil core samples that measure organic matter and carbon content and correlating data sets with data collected with drone remote sensing technology. Hudson Carbon is further exploring how to use this methodology in the context of private carbon markets.
- Cornell University's College of Agriculture and Life Science's Comprehensive Assessment of Soil Health (CASH), has been designed for farmers, gardeners, agricultural service providers, landscape managers and researchers who want to go beyond simply testing the nutrient levels of their soils. The Assessment provides standardized information on important soil biological and physical constraints, in addition to standard nutrient analysis.
- The Northeast Carbon Alliance is developing a standardized approach to collecting data about soil health on four teaching and research farms located in New York and New Jersey.

The fruits of this research may support the eventual creation of a private market for ecosystem services that can serve as a source of offsets within a comprehensive NYS climate solutions system. However, realistically we are years away from being able to quantify, say, pounds of carbon sequestered per acre, at scale across New York's farms in order to support an outcome-based payment system. In the meantime, we suggest a payment system based on verification of implementation and maintenance of farm-specific measures identified in whole-farm AEM planning. Research outcomes should be continuously incorporated into AEM planning frameworks, so that both practices and incentive levels are consistent with what we are learning works best across different types of farms in different regions of the state.

The Final Scoping Plan Should Recommend Investment in the Resources Needed to Achieve Scale

Summary:

- The recommendation in strategy AF12 to expand the capacity of SWCDs should be elaborated and clarified, recognizing that they are the foundation for getting New York's farm conservation management programs to scale. We recommend an immediate two-to-three fold increase in Soil and Water Conservation District network staffing, along with relevant agency staff, designed specifically to build the technical capacity to serve up to 50 times the number of farms each year as the years go forward. Prioritize training for all SWCD staff in supporting soil health and climate resilient farming practices. Additional sources of funding should be secured to support further scaling and broader outreach efforts.

A 50-fold increase in scale – what's needed to reach all of New York's farms with a CRF-style program – represents a moonshot level challenge to state and local government systems that often struggle to absorb even two-to-three fold increases in resources. So it's crucial to build scale smartly, in a well-designed, multi-stage process. Initial scaling efforts should focus on building the capacity to absorb and productively use the *much greater resources* for climate solutions efforts that will eventually be needed and identified as the CLCPA is fully implemented. In this context, Governor Hochul's securing of a near-tripling of funding for the Climate Resilient Farm grants in the 2023 budget is an appropriate level of ambition for a first year scaling effort. To prepare for further scaling, it should be accompanied by a two-to-three fold increase in state agency and Soil and Water Conservation District network staffing to create the technical capacity to serve a far greater volume of farms each year as the years go forward, along with training for all SWCD staff in supporting soil health and climate resilient farming practices.

To further expand the reach of CRF and associated programs in subsequent years, it will be crucial to secure additional sources of funding. The Clean Air, Clean Water and Jobs Environmental Bond Act of 2022 is permissive of capital expenses related to support soil health, and it should be explored as one potential source of funding, as should Regional Greenhouse Gas Initiative funds and funding that may become available under USDA's Natural Resources Conservation Service under the 2023 Farm Bill.

Finally, it is vital to critically assess who current voluntary conservation programs are reaching and who they are not and redesign outreach and education methods to broaden reach. In the next section we provide specific recommendations for redressing barriers to participation in existing voluntary programs that emerged from our discussions with regional stakeholders. Here we would emphasize again the tremendous heterogeneity of New York's farms and the diversity of actors and networks that our farms are connected with and learn from. The early adopters who have participated in voluntary programs in the past are not necessarily representative of farmers throughout the state, and what has worked to reach them may not

work to reach all farms. Engaging a wide array of local and regional partners throughout the state, including SWCDs, nongovernmental organizations, and academic partners, and thoughtfully leveraging the experience of farmers who have adopted soil health and climate resilient farming practices will be crucial to reach all of our farms. The Scoping Plan should direct more resources to paying farmers to mentor other farmers and facilitate networking and resource sharing, through soil health field days and other peer learning opportunities.

The Final Scoping Plan Should Address Barriers to Entry for New York’s Existing Voluntary Programs – Especially Among Those Historically Underserved

Summary:

- All of the chapter strategies relying on voluntary conservation incentive programs should recognize and incorporate the need to understand and address current and historical barriers to New York’s existing programs. Strategies to address these barriers that should be assessed include designing programs to make them more flexible, more equitable, and more financially accessible, offering new forms of financial assistance to de-risk investment in conservation practices, supporting awareness of and markets for products from farms adopting climate resilient practices, and systematically examining and addressing barriers for historically underserved farmers.

In Scenic Hudson’s 2018 stakeholder outreach, we heard repeated complaints about barriers to utilization of New York’s existing voluntary farm conservation management programs, including complex and inflexible program requirements, limited technical and financial resources, and program criteria that favor production systems most likely to contribute to natural resource quality impairment. A systematic review of these barriers should be conducted, and programs adjusted to facilitate and speed uptake of conservation practices. Particular attention should be paid to making these programs function more equitably for those historically underserved, including BIPOC farmers, new and beginning farmers, farmers already practicing regenerative agriculture, and small farms. Supporting socially disadvantaged farmers is not just the right thing to do. It’s also vital in order to rapidly scale the reach of state programs.

Stakeholders shared specific challenges associated with conservation program implementation, such as insufficient personnel, lack of funding and funding cuts, lack of farmer participation in State conservation governing organizations, difficult pathways to funding or narrow scope of funding, ranking formulas that preference for large-scale operations and against farms with diversified product mixes, and poorly-integrated incentive programs that provide no unified linkage to climate resilience as a goal.

Stakeholders also shared concerns about limited or postponed return on investment of conservation practices, concerns that such practices will reduce crop yields and increase management complexity, the absence of local community support for conservation, a lack of capital needed to participate in cost-share programs, and landlord-tenant relationships that discourage investment in conservation practices, particularly those with high-implementation

costs and/or requiring long-term commitment. Black, Indigenous and farmers of color have also faced historic discrimination in the agricultural sector and in the implementation of agricultural programs, reducing their access to financial support.

The following strategies should be examined and as applicable implemented to reduce barriers and increase accessible of voluntary conservation incentive programs.

Restructure programs to reduce design barriers:

- Create more equitable access to grant funding for small farms by establishing a minimum payment for implementing climate resilient management practices. Smaller farms are often capacity challenged to apply for state funds. A minimum payment should be set at a level to account for project implementation and administrative costs borne by the farmer.;
- Increase state matching percentages in programs that require cost shares, and waive the requirement for small farms to provide matching funds under voluntary programs;
- Wherever possible eliminate reimbursement payment models, and provide 100% advance payment to historically underserved producers, including small farms. Where this is not possible, create No Cost Implementation Loans in the form of short-term grants or interest-free loans that cover the costs of conservation practice implementation until reimbursement;
- Review the entire portfolio of state voluntary conservation programs to identify ways to integrate and forefront climate mitigation and adaptation practices, including requiring the use of soil health practices within all publicly funded projects as applicable; and
- Restructure incentive programs to reward farmers who are already practicing climate resilient and regenerative agricultural management techniques, phasing out programs that focus on paying farmers to correct problematic and outdated practices and increasing focus on sustaining benefits to farmers who are sustaining good practices. This does more than align incentives with desired outcomes. In a community where farmers learn from other farmers' experience and such peer learning is vital to the uptake of new practices, rewarding the people who are doing good work sets a crucial example for others to follow.

Provide additional financial assistance to de-risk investment in new practices:

- Provide low-cost loans or cost-share grants to assist in the purchase of new equipment needed for climate-resilient conservation enhancements;
- Provide Transition Income Insurance – low or no-cost income insurance during the transition to more climate-resilient production systems;
- Provide tax rebates or credits on income and/or property taxes for farm businesses using climate-resilient practices; and
- Create flexibility in New York State program criteria in order to maximize the viability of combining state and federal program dollars for on-farm implementation of climate resilient and soil health practices.

Increase awareness of and markets for products from farms adopting climate resilient practices:

- Support peer-to-peer education and local information sources to increase awareness and understanding of conservation opportunities for producers;
- Facilitate collaboration with local early adopters to conduct demonstrations, pilot projects and field tours that showcase conservation practices on their farms;
- Design outreach and engagement activities in collaboration with local leaders representing different adopter categories and other kinds of social groups within the local community; and
- Market products to receptive consumers under a "climate-resilient farm" or similar label that lets consumers know that the farm is contributing to climate-change solutions through practices that mitigate GHGs and/or enhancing community climate resilience.

Systematically examine and address barriers for historically underserved clients, including BIPOC farmers, new and beginning farmers, women farmers, LGBTQ farmers, and other under-represented producers:

- Establish reporting metrics that include demographic information so that programs' ability to serve diverse groups of farmers can be tracked and evaluated;
- Support the continued efforts of the NYS Diversity and Racial Equity Workgroup convened by the NYS Department Agriculture - a working group consisting primarily of historically underserved farmers, along with relevant staff and stakeholders, to review historic and current barriers to participation in state assistance programs and support the advancement of its work plan to address them; and
- Increase the share of technical assistance and grant programs and couple this with targeted, culturally-appropriate outreach and technical support for these populations.

Additional Comments on the Agricultural and Forestry Section

Section AF1 & AF2 (p. 199)

The USDA Forest Service's 'Forest Inventory Analysis' (FIA) program provides much of the underlying data referenced for these strategies, including identifying where forest management would provide the greatest benefits. New York State can work to advance these strategies by providing funding for continued FIA plot sampling within the state. Similarly, data acquired through LiDAR technology on flights can help inform forest management and supportive data products, such as the SUNY ESF program that is referenced in these sections. Financial support from New York State to support frequent and regular LiDAR flights is recommended.

Section AF3; Components of Strategy (pp. 202)

Forest Carbon Certification Program: With respect to the recommendation to implement a forest carbon certification program, the state must define who qualified participants are. A comprehensive program that addresses the needs of small woodlot owners, private citizens and not-for-profit conservation organizations, should be developed, as small woodlot owners in the aggregate make up much of the forest acreage in the state. The program should recognize the

unique needs and capacity constraints of this demographic, and provide the necessary extension services and technical support to facilitate their participation in the program.

Restore degraded forest assets: Regarding proposed efforts to restore degraded forest assets, the state will need to define what programs and services are to be provided with 'substantial funding'. Scenic Hudson recommends Regenerate NY and similar programs, however note they will require additional capacity of staff at the NYS DEC and partners, such as Cornell Cooperative Extension. This is essential to minimize barriers to land owner participation due to complex application processes.

AF4; Components of Strategy (p. 204)

Expand funding: New funding is needed to support public and private tree nurseries that to support tree planting initiatives aligned with the goals of the CLCPA. USDA nursery funding has steadily declined over decades - there are not enough nurseries to support afforestation/reforestation in the state when tree plantings are needed. Plantings are also necessary in urban settings where seedbank/stump-sprouts are likely non-existent.

We also note that tree nursery funding for reforestation/afforestation should be specifically for species native to the eastern US that are climate resilient. We recommend that the state not limit itself to species that are native only to NYS, as climate change will drive species migration and species that are currently native to the eastern US and exist to the south of the state ultimately may become beneficial in terms of implementing this strategy as the climate warms.

AF6; Components of Strategy (p 207)

Any carbon market or carbon banking programs must address the issues of additionality, leakage, and permanence. In particular, additionality should be considered beyond state boundaries and should be balanced against negative aspects of timber product markets elsewhere - if fewer wood products are produced sustainably in NYS or the US, these needs may be pushed to much less sustainable markets overseas. However, the state should also take care to ensure that farmers and foresters who are practicing climate resilient management techniques before carbon market or carbon banking programs are put into place are not excluded from participating in those programs. Additionality is a critical concept to manage the integrity of carbon market and banking programs; however, providing flexibility for farmers and foresters to choose which programs they benefit from is also critical to ensure the long-term viability of those industries.

Conclusion

Scenic Hudson wishes to thank New York State for this opportunity to comment on the draft Scoping Plan, and the members of the Climate Action Council and Climate Justice Working Group for their leadership and excellent work. We look forward to our continued collaboration with New York State, local government and its partners in the not-for-profit and business sectors to implement the recommendations of the final Scoping Plan and achieve the goals of

the CLCPA. We stand ready to provide additional information or clarifications to supplement these comments. Please direct inquiries as follows:

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